

**Appln No. 10/734,517**

**Amdt date October 21, 2004**

**Reply to Office action of August 12, 2004**

**REMARKS/ARGUMENTS**

Claims 1-23 are currently pending in the application, of which claims 1, 14 and 18 are independent. Claims 18-23 are allowed. Claims 2, 3, 5-10, 13, 15 and 16 are objected to as being dependent upon a rejected claim. Claims 1, 4, 11, 12, 14, and 17 are rejected. Reconsideration and allowance of claims 1, 4, 11, 12, 14 and 17 is respectfully requested based on the remarks and arguments submitted below.

**I. Rejection of claims 1, 4, 11, 14 and 17 under 35 U.S.C. §102(b)**

On page 2 of the office action, the Examiner has rejected claims 1, 4, 11, 14 and 17 under 35 U.S.C. §102(b) as allegedly being anticipated by U.S. Patent No. Re 28,752 ("Balamuth II").

Balamuth II discloses "various embodiments of an ultrasonic kit adapted to be used in the home or for industrial purposes." (ABSTRACT). By way of example, Balamuth II discloses "an ultrasonic kit . . . to permit the user to use ultrasonic energy for various hobby purposes; and the kit includes the ultrasonic motor, converter, and a series of interchangeable accessory elements that function in various manners to carry out the hobbycraft functions." (Col. 2, lines 31-36).

In rejecting claims 1, 4, 11, 14 and 17, the Examiner states that "Balamuth shows an ultrasonic dental insert comprising a transducer, a tip 66, a connecting body 75 disposed between and attached to the transducer and the tip, a retaining ring 81 snapped onto the connecting body, and a hand grip 52 fitted at least partially over the connecting body and retaining ring." As to claim 11, the Examiner further states that "the O-ring 110 [is] located in a groove 109 in the connecting body." As to claims 14

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and 17, the Examiner contends that "the method of assembling an ultrasonic dental insert is inherently carried out when the insert of Balamuth is put together."

Applicants respectfully traverse the rejection because of at least the following reasons.

Contrary to the Examiner's assertions, the ring 81 in FIG. 4 of Balamuth II is not a retaining ring, but an o-ring. See Col. 6, lines 30-35 and col. 7, lines 6-10, for example. As such, while the o-ring 81 is mounted around the annular depression 80, it by no means is "snapped onto" the connecting body. Applicants respectfully submit, therefore, that there is no teaching or suggestion of the o-ring 81 being snapped onto the connecting body. Applicants further submit that there is also no teaching or suggestion that the o-ring 81 can be a retaining ring.

On the other hand, claims 1 and 14 of the present invention are directed, respectively, to: "[a]n ultrasonic dental insert comprising: . . . a connecting body disposed between and attached to the transducer and the tip, the connecting body for transmitting the ultrasonic vibrations from the transducer to the tip; a retaining ring snapped onto the connecting body; and a hand grip fitted at least partially over the connecting body and the retaining ring" (Emphasis Added), and "[a] method of assembling an ultrasonic dental insert comprising a tip attached to a connecting body . . . snapping the retaining ring onto the connecting body; and fitting the hand grip to the retaining ring and the connecting body by sliding it at least partially over the connecting body and the retaining ring." (Emphasis Added).

To anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or

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inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Therefore, all claim elements, and their limitations, must be found in the prior art reference to maintain a rejection based on 35 U.S.C. §102. Applicants respectfully submit that Balamuth II does not teach every element of claims 1 and 14, as the o-ring in Balamuth II is not a retaining ring and it does not snap onto the connecting body. Therefore, Balamuth II fails to anticipate claims 1 and 14.

Dependent claims 4, 11, and 17, which are dependent from independent claims 1 and 14, respectively, were also rejected under 35 U.S.C. §102(b) as allegedly being unpatentable over Balamuth II. While Applicants do not acquiesce with the particular rejections to these dependent claims, it is believed that these rejections are moot in view of the remarks and arguments made in connection with independent claims 1 and 14. These dependent claims include all of the limitations of the claim 1 or 14, and recite additional features which together further patentably distinguish them over the cited references. Therefore, dependent claims 4, 11, and 17 are also in condition for allowance.

In view of the above, Applicants respectfully request that the rejection of claims 1, 4, 11, 14 and 17 be withdrawn, and that they be allowed.

## **II. Rejection of claim 12 under 35 U.S.C. § 103(a)**

On page 2 of the Office Action, claim 12 is rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over U.S. Patent No. 3,809,977 ("Balamuth I") in view of U.S. Patent No. 3,654,502

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("Carmona et al.>"). Incidentally, Balamuth II is a reissue of Balamuth I, and as such, Balamuth I includes the same subject matter as Balamuth II.

The Examiner asserts that Balamuth I "discloses that the transducer comprises crystals. Carmona shows an ultrasonic tool wherein the transducer comprises a stack of nickel plates 22p." The Examiner further asserts that "[n]ickel plates have a high resistivity that provides enhanced efficiency." Thus, the Examiner concludes that "[i]t would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the crystals of Balamuth with a stack of nickel plates, in view of Carmona, in order to increase efficiency of the tool."

Applicants respectfully traverse the rejection because of at least the following reasons.

Just like Balamuth II discussed above, Balamuth I does not teach or suggest a retaining ring that is snapped onto the connecting body. Further, Carmona et. al. also does not teach or suggest a retaining ring that is snapped onto the connecting body. Hence, the deficiency in the teaching of Balamuth I is not supplied by the teaching in Carmona et. al.

Three criteria must be met to establish a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success. Finally, the prior art reference, or combination of references, must teach or suggest all the claim limitations. (MPEP § 2142). Applicants respectfully submit that there is no suggestion or motivation in Balamuth I to combine its teaching with that of Carmona et. al. Even if such teachings are combinable,

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which Applicants by no means concede, the combined teachings do not motivate one to arrive at the subject matter of claim 1 of the present invention. Therefore, claim 1 is patentable over Balamuth I in view of Carmona et. al..

Dependent claim 12, which is dependent from independent claim 1, was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Balamuth I in view of Carmona et al. While Applicants do not acquiesce with the particular rejection to this dependent claim, it is believed that this rejection is moot in view of the remarks made in connection with independent claim 1. The dependent claim 12 includes all of the limitations of claim 1, and recite additional features which further patentably distinguish claim 12 over the cited references. Therefore, dependent claim 12 is also in condition for allowance.

In view of the above, Applicants respectfully request that the rejection of claim 12 be withdrawn, and that it be allowed.

### **III. Allowed and allowable subject matter**

Applicants thank the Examiner for favorable consideration and allowance of claims 18-23 and the allowability of claims 2-3, 5-10, 13, 15 and 16 if re-written in independent form. Applicants respectfully submit that the objection to claims 2-3, 5-10, 13, 15 and 16 is moot in view of the remarks and arguments made above concerning the base claims, namely, claims 1 and 14.

### **IV. Conclusion**

In view of the remarks and arguments provided above, it is believed that all pending claims, namely, claims 1-23, are in a

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condition for allowance. Therefore, Applicants respectfully request an early issuance of a patent with claims 1-23.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicants' attorney of record at the number listed below.

Respectfully submitted,

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